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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/924,943	08/09/2001	Tadao Kanuma	040679-1324	1999

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EXAMINER	
SINGH, ARTI R	
ART UNIT	**PAPER NUMBER**
1771	
MAIL DATE	**DELIVERY MODE**
08/03/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	09/924,943	KANUMA, TADAO	
	Examiner	Art Unit	
	Ms. Arti Singh	1771	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *RCE entered on 04/2007*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☐ Claim(s) _____ is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-26 and 29-33* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 04/09/07 has been entered.

Response to Amendment

2. The Examiner has carefully considered Applicant's amendments and accompanying remarks dated 04/09/07. Applicant's amendments to the claims have been entered. At this time in the prosecution the pending claims are 1-26 and 29-33. As noted in the After Final the objections made to the claims and specification are withdrawn, leaving only the art rejection. With regard to the rejection made under 35 USC section 103 on page 2 of the Office action dated 08/09/06, and further elaborated upon in the Advisory Action dated 02/09/07, rejecting claims 1-26 and 29-32 over USPN 6420037 issued to Tsuji et al in view of USPN 6283507 issued to Kami et al. is maintained and now includes new claim 33. This rejection is provided below.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 1-26 and 29-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over USPN 6420037 issued to Tsuji et al. in view of USPN 6283507 issued to Kami et al.

USPN 6420037 issued to Tsuji et al. discloses a silicone rubber based coating composition used for airbags (abstract). The silicone rubber based coating compositions that are applied to the fabric are those well known in the art of airbags and can be organic peroxide ***curing*** type silicone rubber compositions, addition reaction ***curing*** type silicone rubber compositions, condensation reaction ***curing*** type silicone rubber compositions, silicone latexes which turn into rubber via crosslinking as a result of water evaporation can all be used. Among them, addition reaction curing type silicone rubber compositions are preferable, such as an addition reaction curing type liquid silicone rubber compositions (column 2). The Examiner is equating these silicone coatings to be equivalent, if not the same of Applicants first thermosetting silicone, as they are provided in the cured state. The silicone rubber based coating composition of the present invention can be used to make coated base fabric for air bags by coating a fabric of synthetic fiber used for air bags, for example, Nylon 6, Nylon 66, Nylon 46, and other polyamide fiber fabrics, aramid fiber fabrics, fabrics of polyester fibers represented by polyethylene terephthalate, polyether imide fiber fabrics, fabrics of sulfone series fibers, carbon fiber fabrics, and the like therewith and then curing it. The coating amount is preferably not more than 150 g/m^2. The air bag base fabric obtained by coating with the above described silicone rubber base composition is characterized in that the tackiness of the cured coating film surface is extremely low, which provides for superior processability during sewing and such without dusting the coating film surface with talc and calcium carbonate and eliminates the problem of adhesion of the coating film when folded and stored (column 5). In Application Example 4, the instant patent teaches silicone rubber coated fabric was produced by coating the

silicone rubber based coating composition on fabric made of Nylon 66 fiber (420 denier) using a coater to apply the minimum amount permitting uniform coating without irregularities and then curing it by heating for 2 minutes at 180 degrees C in a heating oven. After superimposing the coated surfaces of the coated fabric, applying a room temperature curable silicone rubber adhesive agent (trade name "SE9145. RTV," from Dow Corning Toray Silicone Co., Ltd., Japan) ***there between***, and allowing the fabric to stand at room temperature for 7 days, it was cut into 2.5 cm (width) times 10 cm (length) samples and subjected to a peel test to measure its adhesive strength. In addition, in order to carry out a Scott rubbing test, the samples were subjected to rubbing 1,000 times under a pressure of 2 kgf using a Scott rubbing testing machine, followed by visual evaluation of the state of peeling of the silicone rubber coating film from the fabric (column 7). The other working examples teach Applicant's limitation ranges of viscosity, and placement of the coating. Thus, Tsuji et al teach an airbag, coated with thermoplastic silicone and then additionally coat a second silicone in-between the superimposed layers of silicone/fabric. They teach the coating weight to be within Applicant's claimed range of 200g/m^2 or less and also use similar JIS test standards for hardness and fractural elongation. Tsuji et al, do not explicitly teach the structure of the fabric that is employed. This is remedied by Kami et al USPN 6283507.

Kami et al. disclose a light weight airbag wherein the airbag constitutes a base fabric composed of a woven fabric which has been made using a raw yarn of less than 150 denier (column 4, lines 25-34) and a cover factor of 2100 or more (column 4, lines 35-51) a basis weight of 140 g/m^2 or less (column 4, line 52-57) to which a heat resistant elastomer is applied thereon. At least a part of the sewn areas relating to the main body of the airbag, particularly where a reinforcing fabric is sewn around the inflator fitting hole, being sewn

with a sewing thread and the stitch number complying with a formula $2 \leq T/S \leq 8$ (column 3, line 19) which is exactly the same as required by Applicant in claim 14 (abstract, column 2, line 55 to column 3, line 65). Several different coating processes to increase the tightness in the airbag however most coatings or resins are applied in an amount between 20 and 100 g/m^2 (column 5, line 4). In column 7, lines 13-19. The instant patent teaches the use of many different types of synthetic threads used for sewing maybe nylon, polyester, vinylon, aramids, fluorine, carbon and glass. The woven fabric forming the airbag is formed of filaments like polyamide fibers, nylon, polyester, etc. (column 8, lines 41-60). The teachings of Kami et al. disclose the use of silicone system coatings (column 9, line 19).

Therefore it would have been obvious to a skilled artisan to use the fabric of Kami et al in the airbag composite or as the fabric in the airbag of Tsuji et al. One would have been motivated to use this specific fabric, as it would create an extremely lightweight airbag which can be easily be folded and compacted.

Additionally, given that the combination of Tsuji et al and Kami et al. meet each and every chemical and structural requirement set forth in the claims, then it must meet the property limitations of hardness and fractural elongation recited that depend from said requirements. In other words, it is reasonable to presume that the invention of Tsuji et al and Kami et al. would be readily apparent if not render obvious the physical properties of hardness and fractural elongation are deemed to be inherent/obvious to the invention of Tsuji /Kami et al. The burden is upon Applicant to prove otherwise. See In re Fitzgerald 205 USP 495. Additionally, it should be noted that with regard to the claim limitations of hardness and fractural elongation, it is also the position of the Examiner that these are result effective variables and would be dependant upon the basis weight of the fabric, the amount and composition of the coating, and optimizing any or all criteria would have varying physical

effects on the composite once tested. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have varied the amount of coating, basis weight of the fabric or composition, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art as long as structurally and chemically they are the same. *In re Boesch*, 617 F. 2d 272, 205 USPQ 215 (CCPA 1980). In the present invention, one would have the optimized the coating, motivated by the desire to obtain an airbag that was able to withstand the impact of an airbag upon inflation without disintegrating.

Response to Arguments

5. Applicant's arguments filed 04/09/07 have been fully considered but they are not persuasive. Applicant's traversal is that independent claims 1, 18 and 19 all recite a first silicone placed on opposed sides of the first and second portions, the first silicone comprising a thermosetting resin and a second silicone interposed between the opposed sides of the first and second portions at a junction thereof and that the second silicone comprises and room temperature vulcanizing silicone, and asserts that Example 4 teaches that all of the layers of the Silicone are RTV's and not thermosetting resins with and RTV silicone interposed in-between them. In rebuttal, the Examiner pointed to Example 4 to show that a RTV resin is interposed inbetween two silicone resin layers. However, it appears that Applicant is arguing against the specific example and not the disclosure as a whole, which not only alludes to the use of thermosetting resins, but specifically teaches that the interposed or inbetween resin layer can be a RTV silicone and exactly the same dimethylpolysiloxane that Applicant desires. Therefore, Applicant's arguments are not found to be convincing and the rejection is maintained.

Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ms. Arti Singh whose telephone number is 571-272-1483. The examiner can normally be reached on M-T 9-5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached on 571-272-1478. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Arti Singh/
Primary Examiner
Art Unit 1771
06/24/07

ars